## **ABSTRACT**

The invention refers to a method and an arrangement for signal processing for a target detecting device (1) where a return signal (8) is divided into two parallel branches where a first compression filter (15) compresses the signal in the first branch and where a second compression filter (17) compresses the signal in the second branch. The second compression filter (17) compresses the return signal (8) to a higher degree than the first compression filter (15). A delay filter (19) delays the first compressed signal (16a) compensating for a delay $\Delta T$. Detectors (21, 22) processes the compressed signals (16b, 18) giving rise to detector signals (21, 23). The detector signals are compared and the minimum value of the compared detector signals (21, 23) is selected for all time frames, giving rise to a first output signal (25) comprising the minimum values from the first and second detector signals (21, 23).